



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,513	01/02/2004	John Nash	0119/0029	8687
21395	7590	02/22/2007	EXAMINER	
LOUIS WOO			ALI, SHUMAYA B	
LAW OFFICE OF LOUIS WOO			ART UNIT	PAPER NUMBER
717 NORTH FAYETTE STREET			3771	
ALEXANDRIA, VA 22314				
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE		DELIVERY MODE	
3 MONTHS	02/22/2007		PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/749,513	NASH ET AL.
	Examiner Shumaya B. Ali	Art Unit 3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11/8/06.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 and 11-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 January 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restriction***

Applicant's election without traverse of claims 1-20 in the reply filed on 11/8/06 is acknowledged. Applicant's ground for traversal was found persuasive. Therefore, the restriction requirement mailed on 10/31/06 is hereby withdrawn.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Allowable Subject Matter***

The indicated allowability of claims 7,9,16, and 17 is withdrawn in view of the newly discovered reference(s) to Tayebi US 4,856,508. Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4,7-9,11-16,18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bierman US Patent No. 2,444,417 in view Namey US 2002/0020416A1**

**As to claim 1**, Bierman discloses a face mask (fig.1, 10) of a plastics material comprising: a relatively soft canopy member having a peripheral sealing edge (12) providing a

seal (a seal is created by wearing mask over the mouth and nose followed by strapping around the head to tightly hold the mask in place) with the skin around the nose and mouth of a patient (see fig.1); a relatively rigid reinforcement member (walls of 15 and 16; and 24,30, 35, and 36) in the form of a frame having a plurality of radially-extending arms (fig.1, 35 and 36), and a gas port (22) by which gas can enter the mask, however lacks said reinforcement member being molded integrally with said canopy member as another shot in the dual-shot molding process; said canopy member being molded as one shot in a dual-shot molding process. However, Namey teaches a two-shot injection moulding techniques joining components in a facemask in order to avoid the need for a separate adhesive for mechanical joining of the mask components (see paragraph 36, lines 3-5). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify process of making mask of Bierman to incorporate the step of dual-moulding/two-shot moulding in order to avoid the need for a separate adhesive for mechanical joining of the mask components as taught by Namey.

**As to claim 2**, Bierman discloses facemask according to Claim 1, wherein said peripheral sealing edge of said canopy member is tapered to a reduced thickness and an increased flexibility at its edge (see fig.2).

**As to claim 3**, Bierman discloses wherein said gas port (fig.2, 21) is provided on said Reinforcement member.

**As to claim 4**, Bierman discloses wherein said gas port has a gas connector (fig.1, 22) projecting therefrom for connection to a gas supply tube (see fig.1, a tube is connected to 22), and wherein said port is located in line with the mouth of the patient and said connector is angled

such that it projects down when the mask is applied to the patient's face in an upright position (as shown in fig.1).

**As to claim 7,** Bierman discloses the mask including a selectively closable vent (fig.2, 33 and 24, col.3 lines 15-23) that can be opened to allow flow of gas out of the mask.

**As to claim 8,** Bierman discloses wherein said vent includes a cap member movable between two discrete positions where said vent is open or closed respectively (fig.2, 24; see also col.2 lines 20-55, col.3 lines 15-23).

**As to claim 9,** Bierman discloses wherein said vent is provided on said reinforcement member (see fig.2).

**As to claim 11,** Bierman discloses wherein two of said arms extend towards opposite edges of mask and are terminated by lateral bars extending substantially parallel to an edge of the mask (see fig.1).

**As to claim 12,** Bierman discloses wherein the mask including a harness (34) arranged to extend around the head of the patient, and wherein said lateral bars support a fastener to which said harness is attached (see fig.1).

**As to claim 13,** Bierman discloses wherein said frame includes three arms supporting respectively a gas port a valve to allow gas to enter the mask and a vent that can be opened to allow gas to flow out of the mask (see fig.1).

**As to claim 14,** Bierman discloses wherein the mask including a harness managed to extend around the head of the patient and wherein said harness is attached at opposite ends with said reinforcement member (as seen in fig.1).

**As to claim 15,** Bierman discloses wherein the opposite ends of said harness are of

triangular shape having a free end extending rearward and wherein the free end is adjustably attachable with a part of said harness (see fig.1).

**As to claim 16,** Bierman discloses a face mask assembly including a harness (34) and a mask (10), wherein said mask is of a plastics material and comprises: a relatively soft canopy member (12) having a peripheral sealing edge (a seal is created by placing the canopy over the face/nose followed by tightening the straps 34) providing a seal with the skin around the nose and mouth of a patient, a relatively rigid reinforcement member (walls of 15 and 16; and 24,30, 35, and 36) of frame shaped with a plurality of radially extending arms (fig.1, 35 and 36), a gas port (21) provided on said reinforcement member by which gas can enter the mask, and wherein said harness is arranged to extend around the head of the patient and is attached with said reinforcement member (see fig.1), however lacks said reinforcement member being moulded integrally with said canopy member as another shot in the dual-shot moulding process, however, Namey teaches a two-shot injection moulding techniques joining components in a facemask in order to avoid the need for a separate adhesive for mechanical joining of the mask components (see paragraph 36, lines 3-5). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify process of making mask of Bierman to incorporate the step of dual-moulding/two-shot moulding in order to avoid the need for a separate adhesive for mechanical joining of the mask components as taught by Namey.

**As to claim 18,** Bierman lacks a detailed description of the claimed steps, however Bierman in view of Namey discloses structural limitations and steps required to make the facemask of claim 18 (see above rejection cited for claims 1-17). Thus, the method of making a

facemask as cited in claim 18 would have been obvious result of making the facemask of Bierman in view of Namey.

**As to claim 19,** Bierman discloses a face mask of a plastic material comprising a relatively soft canopy member (fig.1, 12) having a peripheral sealing edge providing a seal (a seal is created by placing the canopy over the face/nose followed by tightening the straps 34) with the skin around the nose and mouth of a patient, a gas port (21) by which gas can enter the mask, and a selectively closable vent (24) that can be opened to allow flow of gas out of the mask (col.2 lines 10-55, and col.3 lines 1-23), a relatively rigid reinforcement member (walls of 15 and 16; and 24,30, 35, and 36), however lacks canopy member being moulded as one shot in a dual-shot moulding process; said reinforcement member being moulded integrally with said canopy member as another shot in the dual shot moulding process, however, Namey teaches a two-shot injection moulding techniques joining components in a facemask in order to avoid the need for a separate adhesive for mechanical joining of the mask components (see paragraph 36, lines 3-5). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify process of making mask of Bierman to incorporate the step of dual-moulding/two-shot moulding in order to avoid the need for a separate adhesive for mechanical joining of the mask components as taught by Namey.

**Claims 5,6,17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bierman US Patent No. 2,444,417 in view of Namey US 2002/0020416A1 and in view of view of Tayebi US 4,856,508**

**As to claims 5 and 17,** Bierman discloses a valve (fig.2, 24) separate from said gas port, however, lacks wherein said valve is arranged to allow air to flow into the mask when there is an

inadequate supply at said gas port. However, Tayebi teaches a facemask having a valve that permits wearer of the mask to inhale thorough the filter liner (of the mask) but on exhalation valve opens to vent exhaled air as well (see col.9, lines 13-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the valve (24) of Bierman in order to provide a valve that can both serve as inhalation and exhalation valve for the purposes of permitting wearer to inhale, but also exhale by opening the valve in order to vent exhaled air as taught by Tayebi.

**As to claim 6,** Bierman discloses wherein said valve is provided on said reinforcement member (see fig.2).

**As to claim 20,** Bierman discloses a face mask assembly including a harness (34) and a mask, wherein said mask is of a plastic material and comprises a relatively soft canopy member (12) having a peripheral sealing edge providing a seal (a seal is created by placing the canopy over the face/nose followed by tightening the straps 34) with the skin around the nose and mouth of a patient, a reinforcement member (walls of 15 and 16; and 24,30, 35, and 36), a gas port (22) provided on said reinforcement member by which gas can enter the mask, wherein said harness is arranged to extend around the head of the patient and is attached with said reinforcement member (see fig.1), wherein said mask includes a selectively closable vent (24) provided on said reinforcement member, said vent being openable to allow gas out of the mask, wherein said mask includes a valve (17) on said reinforcement member and separate from said gas port, however, lacks said valve being arranged to allow air to enter the mask when there is an inadequate supply at said gas port. However, Tayebi teaches a facemask having a valve that permits wearer of the mask to inhale thorough the filter liner (of the mask) but on exhalation

valve opens to vent exhaled air as well (see col.9, lines 13-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the valve (24) of Bierman in order to provide a valve that can both serve as inhalation and exhalation valve for the purposes of permitting wearer to inhale, but also exhale by opening the valve in order to vent exhaled air as taught by Tayebi. Bierman further lacks said canopy member being moulded as one shot in a dual-shot moulding process; a relatively rigid reinforcement member and said reinforcement member being moulded integrally with said canopy member as another shot in the dual-shot moulding process, however, Namey teaches a two-shot injection moulding techniques joining components in a facemask in order to avoid the need for a separate adhesive for mechanical joining of the mask components (see paragraph 36, lines 3-5). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify process of making mask of Bierman to incorporate the step of dual-moulding/two-shot moulding in order to avoid the need for a separate adhesive for mechanical joining of the mask components as taught by Namey.

#### *Claim Objections*

Claim 17 is objected to because of the following informalities: claim 17, in line 2, consider replacing "...reenforcement..." with -reinforcement--.

#### *Response to Arguments*

Applicant's arguments with respect to claim 1-9, and 12-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bloom (US 2,837,090), Malis et al. (US 5,465,712), and Scarberry et al. (US 5,655,527) are cited to teach facemask within the scope of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-W-F 8:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Shumaya B. Ali  
Examiner  
Art Unit 3771

  
JUSTINE R. YU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700  
2/20/07